

CLAIMS

1. Aspirating apparatus particularly for toilets characterized in that it comprises aspirating means (11) connected operationally in the inlet to aspirating ducts (131, 231) provided in the walls of a toilet bowl (14, 114, 5 214, 314) for use in bathrooms and toilets and flowing into the cavity inside (135, 233) defined by said walls near to the deposition area of urine and faeces in said cavity (135, 233) in order to allow aspiration of the smells emitted by said urine and faeces next to the deposition area and in the outlet connected operationally to a different place than the room 10 housing said toilet bowl (14, 114, 214, 314).
2. Aspirating apparatus, according to claim 1, characterized in that it comprises an aspirator (11) operationally connected in the inlet to the outlet pipe (12) of flush box (13) of a toilet bowl (14) and in the outlet to a place outside the room housing said toilet bowl (14). 15
3. Aspirating apparatus, according to the foregoing claim, characterized in that it comprises an antibackflow valve (15) placed downstream said aspirator (11).
4. Aspirating apparatus, according to one or more of the foregoing claims, characterized in that said aspirator (11) is operationally connected in the 20 outlet to the part of the outfall sewer conduit (16) of said toilet bowl (14) placed downstream the siphon (17) of same toilet bowl (14), said system (10) comprises flow interception means (18) disposed between said part of the outfall sewer conduit (16) of said toilet bowl (14) and the outlet pipe

(12) of flush box (13).

5. Aspirating apparatus, according to the foregoing claim, characterized in that said flow interception means (18) comprises a float check-valve (19) placed upstream said aspirator (11).
5. Aspirating apparatus, according to one or more of the foregoing claims, characterized in that it comprises a flow gauge (22) placed downstream, or upstream, said aspirator (11); said flow gauge (22) is operationally connected to the aspirator (11).
7. Aspirating apparatus, according to claims 5 and 6, characterized in that 10 said float check-valve (19) comprises a vibrator, associated with said flow gauge (22), to release the float ball when it is blocked in its proper seat.
8. Aspirating apparatus, according to claim 4, characterized in that said flow interception means (18) comprises a motor-driven three-way valve placed upstream said aspirator (11).
15. 9. Aspirating apparatus, according to one or more of the foregoing claims, characterized in that said flow interception means (18) comprises a motor-driven valve for the bidirectional flow blocking (20) placed downstream said aspirator (11).
10. Aspirating apparatus, according to one or more of the foregoing 20 claims, characterized in that it comprises a flow display placed downstream, or upstream, said aspirator (11); said flow display is operationally connected to said aspirator (11).
11. Aspirating apparatus, according to one or more of the foregoing

claims, characterized in that it comprises a presence sensor (23) for an user being next to said toilet bowl (14).

12. Aspirating apparatus, according to the foregoing claim, characterized in that said presence sensor (23) is composed of a photocell operationally
5 connected to a time switch and to the control of said aspirator (11).

13. Aspirating apparatus, according to one or more of the claims 1, 3, 5, 6,
7, 10, 11 characterized in that said outlet pipe (12) of said flush box (13) of
toilet bowl (14) releases to the outside directly in the atmosphere by
means of a chimney vent flue.

10 14. Aspirating apparatus, according to claim 4, characterized in that said
flow interception means (18) comprises an antibackflow valve (15) placed
downstream said aspirator (11).

15 15. Aspirating apparatus, according to one or more of the foregoing
claims, characterized in that said aspirating ducts are formed by one or
more ducts (131) departing from the back wall of said bowl (114) where
they are connected by means of pipings 132 to said aspirating means;
said couple of ducts (131) extending along the lateral walls of said bowl
until approximately the area before the outfall (133) of said bowl (114), as
the final portion of said couple of ducts (131) is provided with a plurality of
20 aspirating openings (134) communicating with said cavity (135) and turning
towards said outfall area (133) where urines and faeces deposit.

16. Aspirating apparatus, according to one or more of the foregoing
claims, characterized by the fact that said aspirating ducts are formed by a

U-formed duct (231), obtained in the front wall and side walls of said bowl (214), connected to the ends (232) of the back portion of ring duct (233) for the washing water distribution in cavity (233) of said bowl (214), said U-formed duct (231) along the curved portion is equipped with a plurality of 5 aspirating openings (234) communicating with said cavity (233) and turning towards the outfall area (235) of said bowl (214) where urines and faeces deposit.

17. Aspirating apparatus, according to one or more of the foregoing claims, characterized in that said aspirating means are connected by 10 means of a piping (331) to the exhalation valve (332) of said bowl (314).

18. Aspirating apparatus, according to one or more of the foregoing claims, which is characterized as described and illustrated in the enclosed drawings.

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